

GENWAL COAL COMPANY

June 28, 1991

Mr. Daron Haddock
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
355 West, North Temple
Salt Lake City, Utah 84180-1203

RE: Permit # ACT 007-012
Castle Valley Resources
Permit Modification

Dear Mr. Haddock:

Castle Valley Resources requests an amendment to allow disposal of non-hazardous waste from Genwal Coal Companies mine located in Crandal Canyon. This amendment would allow a one time exemption to allow for temporary storage of approximately 600 cys of material.

The material is composed of fractured rock from Genwals crusher project along with some large boulders and soil obtained from the borrow area. The material will be sampled for pH, Electrical Conductivity, Particle Size Analysis (texture), Soluble Ca, Mg and Na, and Selenium.

The material will be placed on the northeast side of the refuse pile. (see attached drawing 4067-6-10A) All runoff from the pile will report to sediment pond #1. The temporary storage area will not result in any additional disturbance.

A plan to allow for permanent disposal will be addressed in the new MRP currently being prepared by Mount Nebo Scientific.

If you have any questions or comments please call.

Sincerely;

for Allen Childs by R. J. Marshall
Allen Childs
V.P./ General Manager
Genwal Coal Company

c.c.

John Passic
Patrick Collins

OWNER TO SUPPLY SIGNS
CONTRACTOR TO INSTALL

GRANDALL CANYON
TRAILHEAD
1/4 MILE

NOTE
MATERIAL WILL BE EXCAVATED
TO LEDGE CONTACT
ACTUAL VOLUME YIELD UNKNOWN

LIMITS OF GRANULAR BORROW

GRANULAR BORROW
AREA

EXISTING CULVERTS

Temp
Storage

EXISTING CULVERT

30-FT OF 24"
REQ'D FOR
EXTENSION

WIRE BASKET GABION W/ 24"
REQ'D SEE DETAILS SHEET

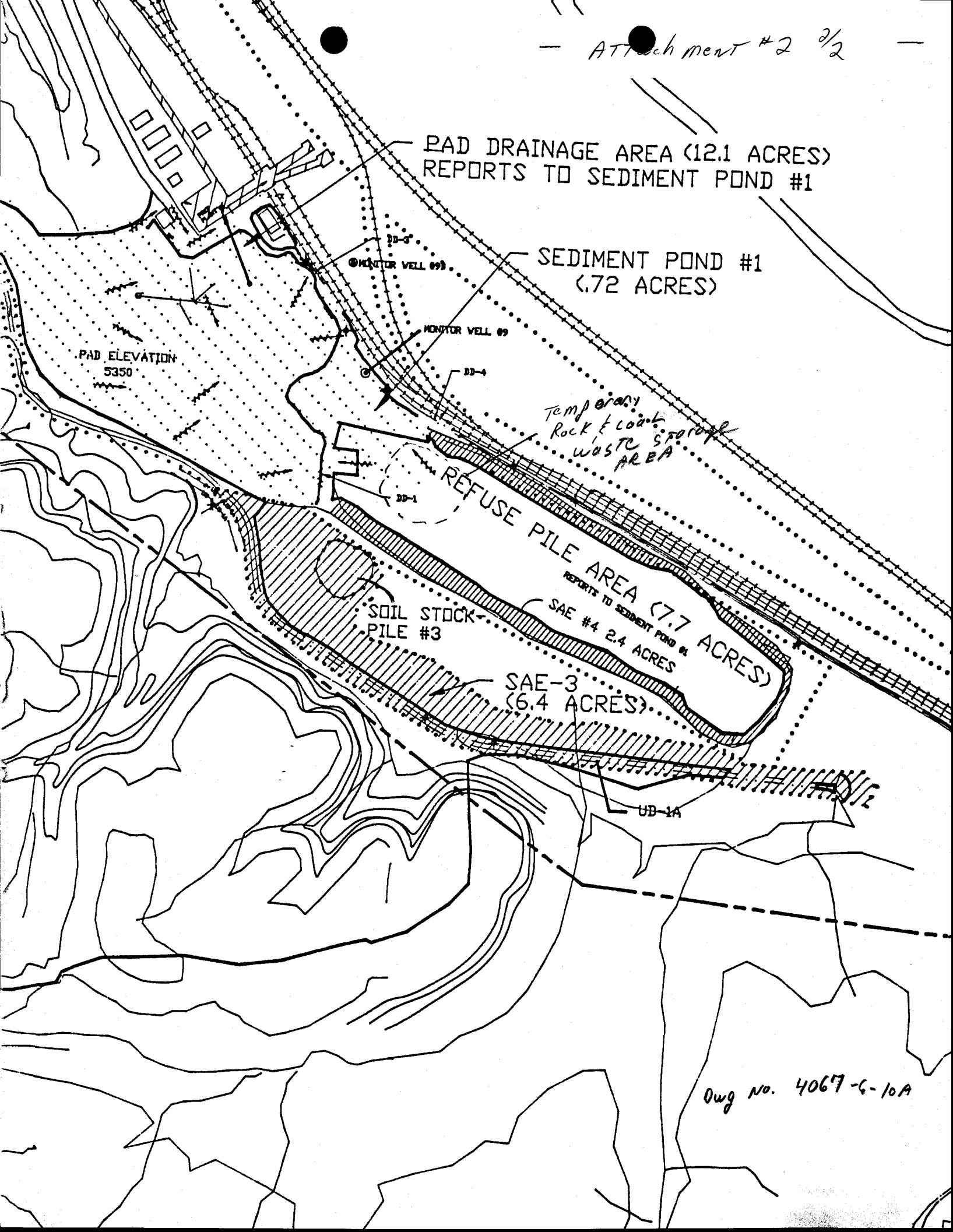
EXISTING DRAINAGE DITCH
RIP-RAP'D
PICAL SECTION

METAL END
SECTION REQ'D

20-FT OF 24" CSP
REQ'D FOR EXTENSION

60-FT OF 24" CSP REQ'D

2'-0"



Dwg No. 4067-G-10A

Attachment #3 11-1

STOCKPILE AREA

CONTROL BUILDING

C-2

DD-6

C-3

C-4

C-6

DD-7

PQ

SAE-3
AREA-28 AC.
FINAL REC.-20 AC.
CONT. REC.-8 AC.

SMALL AREA EXEMPTION BOUNDARY

DISTURBED BOUNDARY

7800
7810
7820

7780
7790

7800

7780

7770

NOTE: THIS PLATE HAS BEEN SUPERSEDED AS APPROPRIATE
BY PLATES 7-5A, 7-5B, AND 7-5C, EXCEPT FOR DEPICTION
OF SMALL AREA EXEMPTIONS.



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*Sediment & Erosion Control Plan for:
Crandall Canyon Mine Road Improvement Project
submitted by Nielson Construction Co.*

We plan to place a temporary silt Catch Fence underneath (south) of Hilfiker Retaining Wall and (north) or above the creek, between STA 25+00 and STA. 26+00 of the Road Plan sheet 2. Also we will place 2 each filter dams made of straw bales, down stream on the creek. See attached map for locations and typical section view of attached plan for the silt Fence and straw filter dams.

As for construction of the wire Basket Gabion Wall at STA 80+00 to STA 82+00, All of this area drains directly into the existing Sediment Pond of Genwall Coal mine and there should not be a problem of sediment getting into the creek.

We will work to lessen the chance of silt & sediment getting in to the stream flow of the Creek

In the pre construction meeting for this project Alan Childs mine superintendent for Genwall Coal Co. agreed to supply the materials and workforce (labors) necessary to build & install the silt Catch Fence & Strawbale Filter dams.

Sta. 29+50 LEFT
 BEGIN RIP RAP P.
 P.I. #50
 U. 101467.1351
 E. 105727.1485
 RP 32.12 40.00
 3.35
 Sta. 27+71.04 P.C.

Sta. 28+00
 INSTALL 24"
 DIA. CSP

CONSTRUCT BIN
 TYPE RETAINING
 WALL. SEE DETAIL
 DWG'S. 008 & 009

Sta. 25+00

Sta. 23+75.00
 INSTALL 24"
 DIA. CSP

Sta. 23+40.12 P.T.

P.I. #40
 U. 101477.0002
 E. 106407.9567

Sta. 21+60
 INSTALL 24"
 DIA. CSP

TOP SOIL

Sta. 20+49.51 P.R.L.

Sta. 21.5

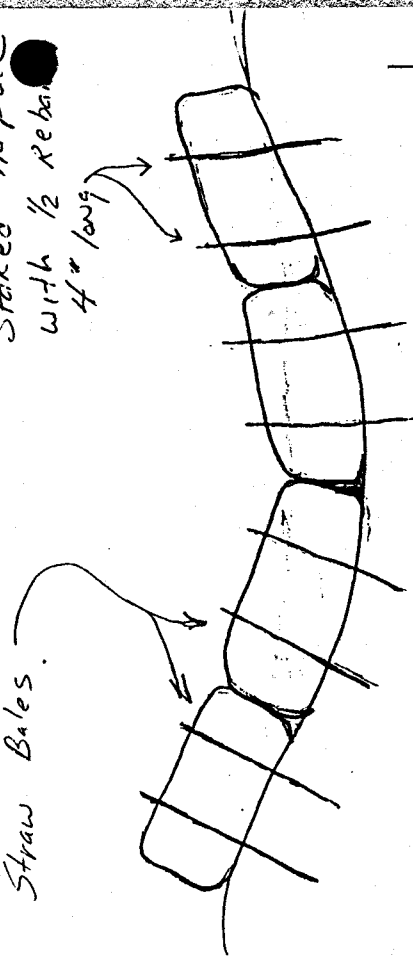
CURVE #50 DATA
 Δ = 7°12'17"
 R = 1588.44'
 L = 199.74'
 T = 100.00'

CURVE #30 DATA
 Δ = 9°00'00"
 R = 287.79'
 L = 390.12'

Attachment #4
 2/3

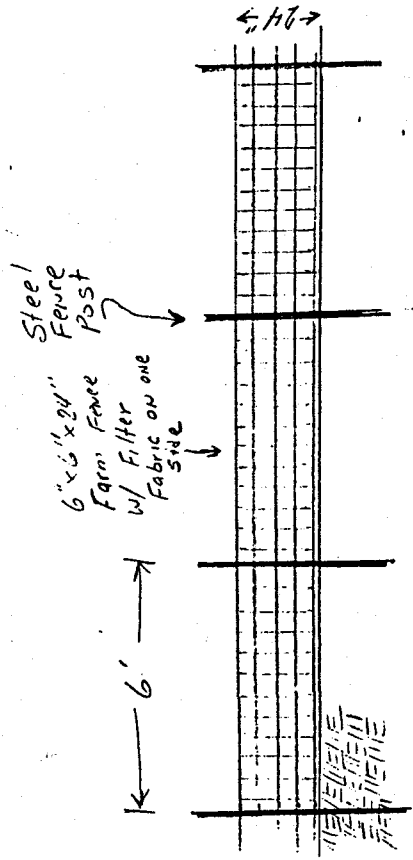
Staked in place
with 1/2 rebar
4" long

Straw Bales



Typical Section

Straw Bale Filter Dam



Typical Section

Silt Filter Fence

— ATTACHMENT 5

1/3

10.5 Mitigation and Management Plans

Surface disturbance will be kept to a minimum. The road will be designed as narrow as practically possible. Encroachment on Crandall Creek will be kept to a minimum to protect the creek as a source of potential food for trout downstream in Huntington Creek.

10.6 Stream Buffer Zone Determination By DOGM

The applicant's proposal for minimizing and monitoring impacts to the Crandall Creek drainage during construction activities in addition to the detail of operational plans as outlined under Section UMC 817.41.56 of the MRP and this document, justify granting a variance to the 100 foot buffer zone requirement of Section UMC 817.57. The Division has determined that the proposal to construct surface facilities connected with the proposed underground coal mine, within 100 feet of Crandall Creek, a perennial stream, is in compliance if the following is adhered to:

1. The applicant states that no further blasting will be done that might deposit rubble in the creek. Temporary sediment control measures will be utilized which include the use of straw dams similar to those used and approved during access road construction, under the USFS road use permit during the summer and fall of 1981. Throughout construction activity, the straw dam provided an acceptable job of retaining sediment.
2. Two more straw dams are proposed for installation in Crandall Creek in the vicinity of stations 71+00 and 79+00. The dams consist of two rows of straw bales laid across the creek with off set ends. The dams will be built high enough so that the water must flow over the center portion of the dam. After construction is completed, the trapped sediment will be removed and then the bales.

3. Embankment erosion control measures will consist of riprapping those sections which will encroach upon Crandall Creek, refer to Plates 3-1, 3-4, 3-5 and 3-7.
4. It is specified in Chapter 12 that pillars are to be designed to ensure that no unplanned subsidence should occur within 200 feet of the center line of Crandall Creek. No mining is proposed under the streams.
5. The area not to be disturbed will be designated a buffer zone and marked as specified in UMC 817.11.
6. The applicant states that monitoring of Crandall Creek on a weekly basis during the construction phase will verify the extent of any impact to Crandall Creek water quality. Applicant will sample for water quality weekly for the following parameters: TSS, pH, EC and water temperature. The two sampling sites will be as follows: (1) above the construction site at 300 feet upstream from the quarter corner designated as station 2A on the construction drawings; and (2) below the construction disturbance at station 72+50. Turbidity measurements will also be taken daily at both sampling locations.
7. The applicant commits to the development and implementation of appropriate mitigation plans with the regulatory authority should stream flow diminish significantly or water quality deteriorate.
8. The original stream channel will not be altered.
9. During and after mining, the water quality and quantity from the stream section within 100 feet of the underground coal mining activities shall not be adversely affected.

A copy of the plan to meet the above requirements was submitted to the Utah Bureau of Water Pollution Control in 1982, with a request for a temporary variance to sediment control standards during the applicant's construction phase.

Turbidity measurements will be taken daily as indicated. Turbidity will not be allowed to increase more than 10% above background levels. The samples will either be taken to a certified lab or analyzed in the field. Turbidity units will be reported in nephelometric turbidity units (NTU's)

Applicant has submitted final drawings, refer to Plate 3-1, with this document that show an elevated USFS development road between the coal stockpiles and the creek. Refer to the narrative in Chapter 3 pertaining to the mine site plans. Temporary sediment control measures as described above will be installed as per the design narrative. It will not be necessary to disturb the creek with vehicles or equipment to complete their construction. Most of the riparian vegetation along the creek can be saved if constructed as designed. Installation of a culvert would destroy the riparian vegetation and the food producing ability of the creek.

10.7 Fish And Wildlife Monitoring

The initial aquatic study and report provides sufficient data, and therefore, applicant proposes to continue monitoring for stream flow and water quality only. The applicant agrees to work with the regulatory authority to develop and carry out appropriate mitigation plans should stream flow diminish significantly or if water quality deteriorates.

Genwal recognized that all amphibian and reptile species (see Table 5 of Appendix 10-3) are protected in Utah. Snake dens, if found, will be protected and reported to the Division of Wildlife Resources.

Attachment A 8 1/2



STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING



No. 004

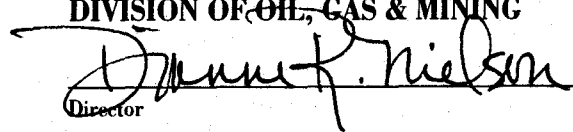
To all who shall see these presents, Greeting:

THIS IS TO CERTIFY that MELVIN A. COONROD S.S.N. 528-58-9203
of ELMO, UTAH has been examined as required by Section 40-10-17(o) of the
Statutes of Utah and Division Rule R614-105 and is hereby authorized to act as a
Coal Mine Surface Blaster in the State of Utah, through DECEMBER 14, 1993

Salt Lake City, Utah, JANUARY 7, 1991


Secretary to the Board of Oil, Gas & Mining

DIVISION OF OIL, GAS & MINING


Director

IRECO Incorporated

Western Division

606 Columbia N.W., Suite 300
Olympia, WA 98501**BLASTING RECORD**COMPANY NAME NIELSON CONSTRUCTION CUSTOMER ORDER # _____LOCATION Belt Portal Genlock Coal DATE _____ TIME _____ AM/PMBLAST LOCATION/
BLAST NUMBER Belt Portal Blast #1 PERMIT # _____NAME AND LICENSE Malvin A. Coonroc EXPIRATION DATE 10/14/1993
NUMBER OF BLASTERS 004 OF LICENSE
PLEASE PRINTSIGNATURE Malvin A. CoonrocDIRECTION AND DISTANCE TO NEAREST
(NON-MINE/NON-CONSTRUCTION RELATED) STRUCTURE N/A

WEATHER _____ TEMP. _____ WIND DIR. _____ WIND SPEED _____

OVERCAST ☐ YES ☐ NO IF YES, CEILING LEVEL _____ FEET

TYPE OF MATERIAL BLASTED	1. <u>Sandstone</u>	NUMBER OF HOLES	1. <u>30</u>	BURDEN	1. <u>5 Feet</u>	SPACING	1. <u>6 Feet</u>
	2. _____		2. _____		2. _____		2. _____
	3. _____		3. _____		3. _____		3. _____

HOLE DIAMETER	1. <u>2.5 inch</u>	HOLE DEPTH	1. <u>13 ft</u>	STEMMING TYPE	1. <u>Gravel 1/2" minus</u>	STEMMING LENGTH	1. <u>6.5 Feet</u>
	2. _____		2. _____		2. _____		2. _____
	3. _____		3. _____		3. _____		3. _____

EXPLOSIVES USEDTOTAL LBS. IN SHOT 330 Lbs +/- 5%DECKING ☐ YES ☒ NO

TYPE/BRAND NAME

LBS./ UNITS

TYPE/BRAND NAME

LBS./ UNITS

Ireco Unigel 2" X 8"1.16 lb stickMAXIMUM WEIGHT
WITHIN ANY
8 MS PERIOD 22 Lbs.MAXIMUM NO. OF
HOLES WITHIN
ANY 8 MS PERIOD 2 holesMETHOD OF FIRING ☐ ELECTRIC ☒ NONELECTRIC BRAND NAME EZ Dets/NTDsCIRCUIT TYPE ☐ SERIES ☐ SERIES IN PARALLEL NO. OF SERIES SequentialBLASTING MACHINE USED Noisless Trunkline/ with starter SERIAL # _____DELAY PERIODS USED EZ Dets - 25ms/350ms - NTDs ms-17TOTAL NUMBER OF CAPS OR DELAY CONNECTORS 60 EZ dets / 8 NTDsMATS OR OTHER PROTECTION USED ☐ YES ☒ NO TYPE _____

NOTE: All items above are required in surface coal operations by Federal Regulations of the Office of Surface Mining (OSM) (30 CFR 715.19(e)(3) and 816.68.)

BLASTING RECORD

SKETCH OF BLAST LAYOUT

IDENTIFY SHOT LOCATION BY STATION, OR BY DIRECTION AND DISTANCE TO KNOWN STRUCTURE OR OBJECT.
SHOW NORTH ARROW. SHOW DELAY NUMBER BY HOLE AND WIRING/CORD/TUBING HOOKUP.

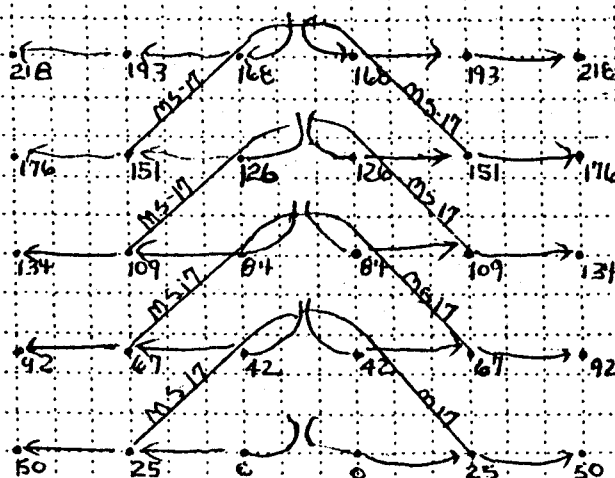
TYPICAL HOLES

BLAST LOCATION &
BLAST NUMBER _____

DATE: 1 1

Portal

Belt
portal



Add 350 ms
to Each Hcb

Swift

SHOW: Depth, Stemming, Decks, Water, Primer Locations, Subdrilling, etc

stem

exhaustive

5

65

QUANTITY OF _____ TONS
MATERIAL BLASTED: _____

POWDER FACTOR: .76 LBS/CUBIC YARD

MATERIAL BLASTED: 432.9 CUBIC YARDS
14.43 yards Per Hole

2-Delay units Per-Hole ^{LBS/TON}

SEISMOGRAPH RESULTS (IF USED, RECORDS ATTACHED)

TYPE	NAME OF OPERATOR	COMPANY

[illegible]

PEAK PARTICLE VELOCITY	MEASUREMENTS			PEAK SOUND PRESSURE
	TRANSVERSE	VERTICAL	LONGITUDINAL	
_____	_____	_____	_____	_____

SHOT RESULTS

FRAGMENTATION _____ MUCKPILE CONFIGURATION _____ FLYROCK _____

COMMENTS _____

BLASTING PLAN

Company Name and Address:

Genwal Coal Company
P.O. Box 1201
Huntington, Utah

Location:

Crandal Canyon Mine belt line

Number of Blasts:

One blast on 6/30/91 @ 9:00 am

Flagman will be posted to prevent access to the canyon.

Verbal warning:

"Fire in the hole"
"Fire"
"Fire"
"Fire"- Shot

Minimum 15 min- (Blast site) inspection by blaster

"All Clear"

Note:

Total control of the area will be exercised during loading and shooting. No unauthorized personnel will be allowed within 1/4 mile of the site.

TO: Mel Coonrod
FROM: Jay Marshall *Jay*
REFERENCE: Blasting at Crandal Canyon Mine
DATE: 28 June 1991

On 6/28/91 Mr. Walt Nowack was notified as to Genwal Coal Companies intent to blast on 6/30/91 at approximately 9 AM. A preblast inventory of all structures was conducted on 6/28/91 all concerned parties within two miles were notified (mine personnel). No structures other than Genwal Coal structures are located within one mile. There are no oil, gas, water wells within the area of influence. Roads and all utilities are the responsibility of Genwal Coal Company. No explosives will be stored on site.

GENWAL COAL COMPANY

June 28, 1991

Walt Novak
Manti - Lasal National Forest
599 Price River Drive
Price, Ut 84501

RE: Surface Blasting Crusher Project

Dear Mr. Novak:

This is to notify you that Genwal Coal Company is going to use explosives on our permitted mine property on 6/30/91. The blast will be done in accordance to all applicable federal and state regulations.

Should you have any questions please call.

Sincerely;

R. Jay Marshall
R. Jay Marshall
Chief Engineer
Genwal Coal Company



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Traffic Control Plan for the:
Crandall Canyon Mine Road Improvement Project.
Submitted by Nielson Construction Co.

IN order to build this Hilfikers Retaining Wall between STA 25+00 + STA 26+00 of the Road Plan sheet 2, we will need to cut into the south lane of the road. We plan to maintain one single lane of traffic thru this area during the construction of this retaining wall. We plan to post signs (Shoulder Work Ahead) 750 Feet below and above the work area. Also we will post (single Lane Ahead) signs 500 Feet above and below the work area. We will place Flagmen 250 Feet above and below the work area. Also we will place orange + white reflective vertical pannels every 50 feet around the work area to mark the edge of the cut.

Also we will post a (Road Work Ahead Sign) at or near the Bridge on Huntington Creek.

We will make sure the road way is clear for traffic at night. Also we will work to lessen the chance of accidents on this Road while we are working.